

AMENDMENTS TO THE CLAIMS

Please **cancel claims 1-21** without prejudice or disclaimer of the subject matter set forth therein.

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of claims:

1-21. (Canceled)

22. (New) A method for preparing an electrophoretic separation article comprising:

i) providing a support comprising a silicon-containing material and washing at least a portion of a surface of said support that contacts an electrophoretic matrix with a weakly alkaline solution; and

ii) filling or coating said support with an electrophoretic matrix;

thereby obtaining an electrophoretic separation article.

23. (New) The method of claim 22 in which the electrophoretic matrix is a gel or entangled polymer.

24. (New) The method of claim 22 or 23 in which the support has a form selected from the group consisting of tabular, hollow cylinder, granular and fiber-like.

25. (New) The method of claim 22, in which the weakly alkaline solution comprises an organic solvent.

26. (New) The method of claim 22, in which the weakly alkaline solution comprises an inorganic base.

27. (New) The method of claim 26, in which the inorganic base is a carbonate or hydrogen carbonate.

28. (New) The method of claim 22 in which the electrophoretic matrix is a composition comprising acrylamide or a derivative thereof or a polymer thereof, and at least two organic solvents.

29. (New) An electrophoretic gel comprising a polyacrylamide polymer or a polymer comprising an acrylamide derivative, and two or more organic solvents.

30. (New) The electrophoretic gel of claim 29, in which one of the organic solvents is an alcohol.

31. (New) The electrophoretic gel of claim 30, in which the alcohol is methanol.

32. (New) The electrophoretic gel of claim 29, in which one of the organic solvents is formamide.

33. (New) The electrophoretic gel of claim 31, in which a second organic solvent is formamide.

34. (New) The electrophoretic gel of claim 29, which further comprises a water-soluble polymer.

35. (New) The electrophoretic gel of claim 34, in which the water-soluble polymer is a dextran, polyethylene glycol or cellulose.

36. (New) A process for preparing an electrophoretic gel comprising polymerizing a composition comprising acrylamide or a derivative thereof in the presence of at least two organic solvents.

37. (New) The process of claim 36, in which the composition comprises a derivative of acrylamide that is N,N'-dimethylacrylamide or N-(hydroxymethyl)acrylamide.

38. (New) The process of claim 36, in which one of the organic solvents is an alcohol.

39. (New) The process of claim 38, in which the alcohol is methanol.

40. (New) The process of claim 36, in which one of the organic solvents is formamide.

41. (New) The process of claim 38, in which a second organic solvent is formamide.

42. (New) The process of claim 36, in which the composition further comprises a water-soluble polymer.

43. (New) The process of claim 42, in which the water-soluble polymer is a dextran, polyethylene glycol or cellulose.

44. (New) An electrophoretic gel made by the process of claim 36.

45. (New) A process for electrophoretic separation of a sample comprising applying said sample to an electrophoretic separation article comprising an electrophoretic gel comprising a

polyacrylamide polymer or a polymer comprising an acrylamide derivative, and two or more organic solvents, and separating the sample by applying an electric field electrophoretic separation article.

46. (New) The process of claim 45, in which the electrophoretic gel further comprises a dextran, polyethylene glycol or cellulose.

47. (New) The process of claim 45, in which the sample comprises a nucleic acid or a peptide nucleic acid.

48. (New) The method of claim 45, in which the sample comprises a DNA or a RNA.

49. (New) The method of claim 45, in which the polar solvent comprises formamide or an alcohol or a mixture thereof.

50. (New) The method of claim 49 in which the alcohol is methanol.

51. (New) The electrophoretic gel of any one of claims 29-35 that is a capillary gel or a slab gel.

52. (New) The electrophoretic gel of claim 44 that is a capillary gel or a slab gel.